



CURRICULUM OUTLINE  
FOR  
VASCULAR SURGERY

**MAY 2016**

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# INTRODUCTION

## EXPLANATION OF THE CURRICULUM OUTLINE

The **SCORE Curriculum Outline for Vascular Surgery** is a list of **vascular surgery patient care topics** to be covered in a vascular surgery training program. It is designed to be relevant to five-year integrated training programs, as well as two-year fellowship programs.

The outline has been created with input from the Vascular Surgery Board of the American Board of Surgery, the Association of Program Directors in Vascular Surgery, and the Society for Vascular Surgery.

**Please note:** The topics below may not directly match the [current modules](#) available on the SCORE Portal ([www.surgicalcore.org](http://www.surgicalcore.org)). This document is forward-looking, reflecting the latest updates. There has also been an effort to consolidate topics wherever possible, which will be reflected on the portal as the development and updating of modules continues.

### Category 1: Cerebrovascular

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#### Diseases/Conditions

- [Carotid Artery, Atherosclerotic – Asymptomatic](#)
- [Carotid Artery, Atherosclerotic – Symptomatic](#)
- Carotid Artery Dissection
- Great Vessel Disease
- Uncommon Carotid Conditions – FMD, Aneurysm, Carotid Body Tumor
- Vertebral Artery Disease – Atherosclerotic, FMD, Dissection

#### Operations/Procedures

- Carotid Artery Endarterectomy – Patch and Eversion
- [Carotid Artery Stenting](#)
- Great Vessel – Endovascular
- Great Vessel – Open
- Vertebral Artery Procedures – Open and Endovascular

### Category 2: Upper Extremity

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#### Diseases/Conditions

- Atherosclerotic Disease – Claudication, Rest Pain, Tissue Loss
- Axillosubclavian Aneurysmal Disease
- Occupational Vascular Diseases
- Upper Extremity Ischemia, Acute – Embolization, Iatrogenic

#### Operations/Procedures

- [Carotid Subclavian Artery Bypass](#)

## Category 3: Thoracic Outlet Syndromes

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### Diseases/Conditions

- Thoracic Outlet Syndrome – Neurogenic, Arterial, Venous

### Operations/Procedures

- [First Rib Resection – Infraclavicular](#)
- First Rib Resection – Supraclavicular
- [First Rib Resection – Transaxillary](#)

## Category 4: Abdominal/Iliac/Peripheral Arterial Aneurysms

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### Diseases/Conditions

- Aortic Aneurysm – Infrarenal and Juxtarenal
- [Aortic Aneurysm – Ruptured](#)
- Femoral and Popliteal Artery Aneurysm
- Iliac Artery Aneurysm

### Operations/Procedures

- Abdominal Aortic Aneurysm (Infrarenal and Juxtarenal) Repair – Open
- Endovascular Abdominal Aortic Aneurysm Repair (EVAR) – Elective
- Endovascular Abdominal Aortic Aneurysm Repair (EVAR) – Rupture
- Femoral Artery Aneurysm Repair
- Iliac Artery Aneurysm Repair – Open and Endovascular
- Popliteal Artery Aneurysm Repair – Open and Endovascular
- Suprarenal Aortic Aneurysm Repair – Open

## Category 5: Lower Extremity Occlusive Disease

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### Diseases/Conditions

- [Claudication](#)
- Compartment Syndrome
- [Diabetic Foot Ulcers and Infections](#)
- Lower Extremity Ischemia, Acute – Including Blue Toe Syndrome
- [Lower Extremity Ischemia, Chronic](#) – Rest Pain, Ulcer and Gangrene
- Popliteal Artery Entrapment

### Operations/Procedures

- [Aortobifemoral Bypass](#)
- Axillobifemoral Bypass
- Common/Profunda Femoral Endarterectomy
- Femoral AK Popliteal Bypass – Prosthetic/Vein
- Femoral BK Popliteal/Tibial Bypass with Prosthetic/Vein
- [Femoral Popliteal Artery Embolectomy](#)
- Femoral PTA/Stenting
- Iliac Endovascular PTA with/without Stenting
- Thrombolytic Therapy
- Tibial PTA/Stenting

## Category 6: Mesenteric

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### Diseases/Conditions

- Celiac Compression Syndrome
- [Mesenteric Ischemia, Acute](#) – Embolus, Thrombosis, NOMI
- Mesenteric Ischemia, Chronic
- Mesenteric and Portal Vein Thrombosis
- Superior Mesenteric Artery Dissection
- Visceral Aneurysm

### Operations/Procedures

- Mesenteric Bypass/Endarterectomy
- SMA Stenting
- SMA Thrombectomy – Open

## Category 7: Renal

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### Diseases/Conditions

- Renal Artery Aneurysm
- Renovascular Hypertension

### Operations/Procedures

- Endovascular Renal Aneurysm Repair
- Renal Artery Aneurysm Repair
- Renal Artery Bypass – Aortorenal, Splenorenal, Hepatorenal

## Category 8: Thoracic Aorta

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### Diseases/Conditions

- [Aortic Dissection](#) – Including Variants of Penetrating Ulcer and Intramural Hematoma
- Atherosclerotic Thoracic Aortic Disease – Coral Reef/Shaggy Aorta
- Genetic Aortic Diseases
- Thoracic Aortic Aneurysm
- Thoracoabdominal Aneurysm

### Operations/Procedures

- Thoracic Aortic Dissection Repair – Open and Endovascular
- Thoracic Aortic Injury (Blunt) Repair – Endovascular
- Thoracoabdominal Aneurysm Repair – Open

## Category 9: Venous Disease

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### Diseases/Conditions

- [Chronic Venous Insufficiency – Including Venous Leg Ulcer](#)
- Deep Venous Thromboembolic Disease – Upper and Lower Extremity
- Inferior Vena Cava Tumors
- Pelvic Venous Congestion Syndrome
- Pulmonary Embolus
- Superficial Thrombophlebitis
- Superior Vena Cava Syndrome
- [Varicose Vein Disease](#)
- Venous Malformations
- Venous Obstructive Lower Extremity, Chronic

### Operations/Procedures

- DVT (Acute) Treatments
- Sclerotherapy
- Varicose Vein Procedures
- Vena Caval Filter Insertion and Removal
- Venous Obstructive Disorders Treatments

## Category 10: Liver/Portal Hypertension

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### Diseases/Conditions

- Portal Hypertension

### Operations/Procedures

- Portal Systemic Decompression

## Category 11: Lymphatic Problems

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### Diseases/Conditions

- Lymphedema/Lymphangitis – Primary and Secondary

## Category 12: Vascular Trauma

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### Diseases/Conditions

- [Posterior Knee Dislocation](#) – Popliteal Injury
- Supracondylar Humeral Fracture
- Vascular Injury – Abdomen (Including Mesenteric)
- Vascular Injury – Extremities
- Vascular Injury – Great Vessels
- Vascular Injury – Neck

### Operations/Procedures

- Abdominal Vascular Exposures
- Thoracic Aortic Injury (Blunt) Repair – Endovascular

## Category 13: Angioaccess

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### Diseases/Conditions

- [Ischemic Steal Syndrome](#)

### Operations/Procedures

- Failing/Thrombosed Access – AVF and AVG Management
- Hemodialysis Access Catheter
- Non-Thrombotic Access Complications
- Peritoneal Dialysis Catheter Placement

## Category 14: Complications

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### Diseases/Conditions

- Anastomotic Aneurysm
- Aortocaval Fistula
- Chylous Ascites/Chylothorax
- Femoral Complications – Incision, Lymphocele, Infection...
- Graft Infections, Aortic
- Graft Infections, Peripheral – Exposed Vessels/Graft
- Pseudoaneurysm, Iatrogenic
- Tracheoinnominate Fistula

### Operations/Procedures

- Anastomotic Aneurysm Repair
- Aortic Graft-Enteric Fistula/Erosion Removal –Extra-Anatomic vs In Situ Replacement
- Neo-Aortoiliac System Procedure
- Pseudoaneurysm Repair, Iatrogenic – Open vs. Injection

## Category 15: Amputations

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### Operations/Procedures

- Amputations – Foot (Toe, Ray, TMA, Chopart, Lisfranc, Symes)
- Amputations – Lower Extremity (AKA, Through the Knee, BKA)
- Amputations – Upper Extremity

## Category 16: Imaging/Vascular Laboratory

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### Vascular Laboratory

- Abdominal Vascular, Aortic Aneurysm and Post-EVAR Assessment
- Abdominal Vascular, Renal and Mesenteric
- Cerebrovascular, Carotid
- Cerebrovascular, Intracranial (TCD)
- Cerebrovascular, Intraoperative
- Peripheral Arterial, Duplex Evaluation of Occlusive Disease
- Peripheral Arterial, Physiologic Testing
- Venous, Evaluation of Upper and Lower Extremity DVT
- Venous, Evaluation of Venous Insufficiency

### Other Imaging

- CT/CTA
- MRA

## Category 17: Vascular Medicine

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### Diseases/Conditions

- Buerger's Disease
- Diabetes Mellitus
- Hyperlipidemia
- Hypertension
- Other Risk Factors Affecting Atherosclerosis – Homocystinemia, CKD, Hypercoagulability, etc.
- Tobacco Use/Smoking Cessation

## Category 18: Miscellaneous

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### Diseases/Conditions

- Aortic Anomalies, Congenital
- Fluoroscopy, Radiation, and Radiation Safety
- Frostbite
- Mycotic Aneurysms
- Nonatherosclerotic Disease – Takayasu's Disease, Giant Cell Arteritis, Raynaud's
- Pediatric Vascular Surgical Problems

### Operations/Procedures

- Sympathectomy/Sympathetic Block